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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/032,349	12/21/2001	Andre Zaccarin	884.447US1	4986
7:	590 12/13/2004		EXAM	INER
Sharmini N. Green			LEE, Y YOUNG	
BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP 12400 Wilshire Boulevard, Seventh Floor			ART UNIT	PAPER NUMBER
Los Angeles, CA 90025			2613	
			DATE MAII ED: 12/13/200	4

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
	10/032,349	ZACCARIN, ANDRE			
Office Action Summary	Examiner	Art Unit			
	Y. Lee	2613			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the	correspondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.1: after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period v - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be ti y within the statutory minimum of thirty (30) da vill apply and will expire SIX (6) MONTHS fron , cause the application to become ABANDONI	mely filed ys will be considered timely. In the mailing date of this communication. ED (35 U.S.C. § 133).			
Status		·			
1) Responsive to communication(s) filed on					
2a) ☐ This action is FINAL . 2b) ☑ This	action is non-final.				
·	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.				
Disposition of Claims					
4) Claim(s) 1-30 is/are pending in the application. 4a) Of the above claim(s) is/are withdray 5) Claim(s) is/are allowed. 6) Claim(s) is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) 1-30 are subject to restriction and/or expressions.	vn from consideration.				
Application Papers	,				
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) accomplished any objection to the	epted or b)□ objected to by the				
Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex	• • • • • • • • • • • • • • • • • • • •	•			
Priority under 35 U.S.C. § 119					
 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priori application from the International Bureau 	s have been received. s have been received in Applicat ity documents have been receiv ı (PCT Rule 17.2(a)).	ion No ed in this National Stage			
* See the attached detailed Office action for a list	of the certified copies not receive	ed.			
Attachment(s)					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other:				

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DETAILED ACTION

Election/Restrictions

- 1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-9 and 16-26, drawn to estimating a motion vector by defining a plurality of search sets, classified in class 375, subclass 240.16.
 - II. Claims 10-15, drawn to estimating a motion vector by determining a plurality of partial distortion measures, classified in class 375, subclass 240.27.
 - III. Claims 27 and 28, drawn to an image encoder minimizing distortion functions based only on a set of two or more collinear pixels from a row or column, classified in class 375, subclass 240.24.
 - IV. Claims 29 and 30, drawn to a method of estimating a motion vector by identifying a set of two or more candidate blocks based on only one line of pixels, classified in class 375, subclass 240.24.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II-IV are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the method of estimating a

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motion vector does not require the particulars of row and column locations of the candidate blocks for determining partial distortion measures. The subcombination has separate utility such as estimating motion vectors based on collinear pixels rather than search areas of the reference frame.

- 3. Inventions II, IV and III are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the image encoder as claimed can be used to practice another and materially different method where candidate search areas are defined by selective pixels rather than a fixed block.
- 4. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
- 5. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, III, or IV, and vice versa, restriction for examination purposes as indicated is proper.
- 6. A telephone call was made to Mr. A. Pedersen-Giles on 12/7/04 to request an oral election to the above restriction requirement, but did not result in an election being made.

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Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Y. Lee whose telephone number is (703) 308-7584.

The examiner can normally be reached on (703) 308-7584.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on (703) 305-4856. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Y. Lee

Primary Examiner
Art Unit 2613